documents may be obtained from the following organizations:

(1) American Association of State Highway and Transportation Officials (AASHTO), Suite 249, 444 North Capitol Street, NW., Washington, DC 20001.

(2) American Welding Society (AWS), 2501 Northwest Seventh Street, Miami, FL 33125.

[62 FR 15397, Apr. 1, 1997, as amended at 67 FR 6395, Feb. 12, 2002; 69 FR 18803, Apr. 9, 2004; 71 FR 26414, May 5, 2006; 74 FR 28442, June 16, 2009]

PART 626—PAVEMENT POLICY

Sec.
626.1 Purpose.
626.2 Definitions.
626.3 Policy.

AUTHORITY: 23 U.S.C. 101(e), 109, and 315; 49 CFR 1.48(b)

SOURCE: 61 FR 67174, Dec. 19, 1996, unless otherwise noted.

§ 626.1 Purpose.

To set forth pavement design policy for Federal-aid highway projects.

§ 626.2 Definitions.

Unless otherwise specified in this part, the definitions in 23 U.S.C. 101(a) are applicable to this part. As used in this part:

Pavement design means a project level activity where detailed engineering and economic considerations are given to alternative combinations of subbase, base, and surface materials which will provide adequate load carrying capacity. Factors which are considered include: Materials, traffic, climate, maintenance, drainage, and life-cycle costs.

§ 626.3 Policy.

Pavement shall be designed to accommodate current and predicted traffic needs in a safe, durable, and cost effective manner.

PART 627—VALUE ENGINEERING

Sec.
627.1 Purpose and applicability.
627.3 Definitions.
627.5 Applicable projects.
627.7 VE programs.
627.9 Conducting a VE analysis.

AUTHORITY: 23 U.S.C. 106(e), 106(g), 106(h), 112(a) and (b), 302, 315; and 49 CFR part 18.

SOURCE: 77 FR 15254, Mar. 15, 2012, unless otherwise noted.

§ 627.1 Purpose and applicability.

(a) The purpose of this part is to prescribe the programs, policies and procedures for the integration of value engineering (VE) into the planning and development of all applicable Federal-aid highway projects.

(b) Each State transportation agency (STA) shall establish and sustain a VE program. This program shall establish the policies and procedures identifying when a VE analysis is required. These policies and procedures should also identify when a VE analysis is encouraged on all other projects where there is a high potential to realize the benefits of a VE analysis.

(c) The STAs shall establish the policies, procedures, functions, and capacity to monitor, assess, and report on the performance of the VE program, along with the VE analyses that are conducted and Value Engineering Change Proposals (VECP) that are accepted. The STAs shall ensure that its subrecipients conduct VE analyses in compliance with this part.

§ 627.3 Definitions.

The following terms used in this part are defined as follows:

Bridge project. A bridge project shall include any project where the primary purpose is to construct, reconstruct, rehabilitate, resurface, or restore a bridge.

Final design. Final design has the same meaning as defined in 23 CFR 636.103.

Project. A portion of a highway that a STA or public authority proposes to construct, reconstruct, or improve as described in the preliminary design report or applicable environmental document. A project is defined as the logical termini in the environmental document and may consist of several contracts, or phases of a project or contract, which are implemented over several years.

Total project costs. The costs of all phases of a project including environment, design, right-of-way, utilities and construction.

Value Engineering (VE) analysis. The systematic process of reviewing and assessing a project by a multidisciplinary team not directly involved in the planning and development phases of a specific project that follows the VE Job Plan and is conducted to provide recommendations for:

(1) Providing the needed functions, considering community and environmental commitments, safety, reliability, efficiency, and overall life-cycle cost (as defined in 23 U.S.C. 106(f)(2));

(2) Improving the value and quality of the project; and

(3) Reducing the time to develop and deliver the project.

Value Engineering (VE) Job Plan. A systematic and structured action plan for conducting and documenting the results of the VE analysis. While each VE analysis shall address each phase in the VE Job Plan, the level of analysis conducted and effort expended for each phase should be scaled to meet the needs of each individual project. The VE Job Plan shall include and document the following seven phases:

(1) *Information Phase:* Gather project information including project commitments and constraints.

(2) *Function Analysis Phase:* Analyze the project to understand the required functions.

(3) *Creative Phase:* Generate ideas on ways to accomplish the required functions which improve the project's performance, enhance its quality, and lower project costs.

(4) *Evaluation Phase:* Evaluate and select feasible ideas for development.

(5) *Development Phase:* Develop the selected alternatives into fully supported recommendations.

(6) *Presentation Phase:* Present the VE recommendation to the project stakeholders.

(7) *Resolution Phase:* Evaluate, resolve, document and implement all approved recommendations.

(g) *Value Engineering Change Proposal (VECP).* A construction contract change proposal submitted by the construction contractor based on a VECP provision in the contract. These proposals may improve the project's performance, value and/or quality, lower construction costs, or shorten the delivery time, while considering their impacts on the project's overall life-cycle cost and other applicable factors.

§ 627.5 Applicable projects.

(a) A VE analysis shall be conducted prior to the completion of final design on each applicable project that utilizes Federal-aid highway funding, and all approved recommendations shall be included in the project's plans, specifications and estimates.

(b) Applicable projects shall include the following:

(1) Each project located on the National Highway System (NHS) (as specified in 23 U.S.C. 103) where the estimated total project cost is $25 million or more that utilizes Federal-aid highway funding;

(2) Each bridge project located on or off of the NHS where the estimated total project cost is $20 million or more that utilizes Federal-aid highway funding;

(3) Any major project (as defined in 23 U.S.C. 106(h)), on or off of the NHS, that utilizes Federal-aid highway funding in any contract or phase comprising the major project;

(4) Any project for which a VE analysis has not been conducted and a change is made to the project's scope or design between the final design and the letting which results in an increase in the project's total cost exceeding the thresholds identified in paragraphs (b)(1), (2) or (3) of this section; and

(5) Any other Federal-aid project the FHWA determines to be appropriate.

(c) An additional VE analysis is not required if, after conducting the VE analysis required under this part for any project meeting the criteria of paragraph (b) of this section, the project is subsequently split into smaller projects in the design phase or if the project is programmed to be completed by the letting of multiple construction projects. However, the STA may not avoid the requirement to conduct a VE analysis on an applicable project by splitting the project into smaller projects, or multiple construction projects.

(d) The STA's VE Program's policies and procedures shall identify when any additional VE analysis should be considered or conducted in the planning